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10/725,844

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EXAMINER

BHATTIA, AJAY M

ART UNIT

PAPER NUMBER

2145

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/725,844

Applicant(s)

WILLES ET AL.

Examiner

AJAY BHATIA

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,24-26,39,59-61,78,101-103,114,133-135 and 150-162 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,24-26,39,59-61,78,101-103,114,133-135 and 150-162 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/2/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/16/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 101

For the proposes for reviewing the present claims examiner has interpreted the term “**node**” as to be a hardware devices comprising as physical processor, if this interpretation is incorrect claims 1,24-26,39,59-61,150-152,153,156, 159 and 160 are rejected under 101 as being directed to non statutory subject matter. Applicant is required to respond in the next action to the positive or negative (if negative respond to the 101) failure to do so, will be assumed that applicant intends a node to be directed to software and therefore the above mentioned claims are non-statutory. In addition applicant will have submitted a non-responsive response

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 159-162 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has claimed “but not other sources” and “no above the predetermined threshold” applicant is suggested to cancel the current terminology and use terminology that is consistent with the specification.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "power line network" with noise must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 24-26, 3 rejected under 35 U.S.C. 102(b) as being anticipated by Aharoni et al. (United States Patent 6,014,694A).

For claim 1, Aharoni teaches, a system for allocating bandwidth on a network comprising:

one or more network nodes comprising a data interface, (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) a compression module, (Aharoni, Col. 3 lines 7-25, compression) a first local network interface, and a first bandwidth adjustment module, wherein the data interface is adapted to receive data streams from two or more sources, said compression module adapted to control a plurality of compression parameters associated with compressing the received data streams for transmission over a local network having changing network conditions, the first local network interface adapted to establish communication over the local network, said first bandwidth adjustment module adapted to allocate bandwidth of the local network to each of the received data streams proportional to a network load compensation factor representing changes in available bandwidth within the local network, ; (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

and a master node comprising a second local network interface adapted to establish communication with the one or more network nodes over the local network, and a second bandwidth adjustment module adapted to determine the plurality of compression parameters for the compression module. (Aharoni, Col. 6 line 61 to Col. 7 line 7, adjust compression ratio)

For claim 24, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 1 further comprising an external network connected to said master node. (Aharoni, Col. 2 lines 10-27, LAN and ATM, Col. 3 lines 46-60, rate control unit)

For claim 25, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 24 further comprising a remote monitoring station connected to said external network wherein said remote monitor station receives data from said data interface. (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 26, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 24 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 39, Aharoni teaches, a system for allocating bandwidth on a network comprising:

a first network node comprising a data interface, (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) a first bandwidth adjustment module, a first local network interface, and a compression module, (Aharoni, Col. 3 lines 7-25, compression) wherein the data interface is adapted to receive data streams via multiple connections to sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) , said compression module adapted to control a plurality of compression parameters associated with compressing of the received data streams for transmission over a local network having changing network conditions, the first local network interface adapted to establish communication over the local network, said first bandwidth adjustment module adapted to allocate predetermined bandwidth of the local network to a data stream received via a first connection of the multiple connections wherein the first connection has capacity above a predetermined threshold, the first adjustment module further adapted to allocate bandwidth remaining after allocating the predetermined bandwidth to one or more data streams received via second connections of the multiple connections wherein each of the second connections has capacity not above the predetermined threshold, ; (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

and a second network node comprising a second bandwidth adjustment module adapted to determine the plurality of compression parameters for the compression module, and a second local network interface adapted to establish communication with

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the one or more network nodes over the local network. (Aharoni, Col. 6 line 61 to Col. 7 line 7, adjust compression ratio)

For claim 59, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 39 further comprising an external network connected to said first or second network node. (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 60, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 59 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface. (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 61, Aharoni teaches, a system for allocating bandwidth on a network as recited in claim 59 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 78, Aharoni teaches, a method for allocating bandwidth on a network comprising the steps of:

receiving two or more data streams from sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) at a network node sampling

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network conditions of a local network between the network node and a master node, the local network having changing network conditions; (Aharoni,)

determining a network load compensation factor representing changes in available bandwidth of the local network based on the sampled network conditions; (Aharoni,)

allocating bandwidth for transmission of the data streams over the local network in proportion to the network load compensation factor; (Aharoni,)

and sending the data streams from the network node to the master node using the allocated bandwidth. (Aharoni,)

For claim 101, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 78 further comprising said master node communicating with an external network. (Aharoni, Col. 2 lines 10-27, LAN, Col. 3 lines 46-60, rate control unit)

For claim 102, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 101 further comprising sending data stream of the two or more data streams to a remote monitor station via said external network the local network and the master node. (Aharoni, Col. 2 lines 10-27, ATMs)

For claim 103, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 101 wherein said external network is a network selected from the group

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consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 114, Aharoni teaches, a method for allocating bandwidth on a network comprising:

receiving two or more data streams from sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) via multiple connections to sources at a first network node determining available bandwidth of a local network between the first network node and a second network node by sampling network conditions of the local network allocating predetermined bandwidth of the local network to a first data stream received via a first connection of the multiple connections, the first connection having a capacity above a predetermined threshold; (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

allocating bandwidth remaining after allocating the predetermined bandwidth to one or more second data streams received via second connections of the multiple connections, each of the second connections having capacity not above the predetermined threshold; (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

and sending the first data stream to the second network node via the local network using the allocated bandwidth; (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

and sending the second data streams to the second network node via the local network using the remaining bandwidth. (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

For claim 133, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 114 further comprising communicating with an external network by the second network node. (Aharoni, Col. 2 lines 10-27, ATM)

For claim 134, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 133 further comprising sending data stream of the two or more data streams to a remote monitor station via said external network, the local network and the second network node. (Aharoni, Col. 2 lines 10-27, LAN)

For claim 135, Aharoni teaches, a method for allocating bandwidth on a network as recited in claim 133 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Aharoni, Col. 2 lines 10-27, LAN and ATM)

For claim 150, Aharoni teaches, the system of claim 39, further comprising:

a local device identifier; (Aharoni, Col. 3 lines 47-62, single unit identified as rate control unit)

and wherein responsive to the local device identifier prohibiting the second network node from operating as a master node, the second network node operates as a network node. (Aharoni, Col. 3 lines 47-62, single unit identified as rate control unit prevents the identification of another)

For claim 151, Aharoni teaches, the system of claim 39, wherein the master node is configured to control bandwidth for one or more data sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) on the local network. (Aharoni,)

For claim 152, Aharoni teaches, the system of claim 39, wherein the first network node is configured to control bandwidth for one or more data sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) connected to the first network node. (Aharoni,)

For claim 159, Aharoni teaches, the system of claim 1, wherein the first bandwidth adjustment module is further adapted to allocate predetermined bandwidth of the local network to a data stream received via a first connection of the multiple connections, the first connection having capacity above a predetermined threshold, the first adjustment module further adapted to allocate bandwidth remaining after allocating the predetermined bandwidth to one or more data streams received via second connections of the multiple connections, each of the second connections having capacity not above

the predetermined threshold. (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

For claim 160, Aharoni teaches, the system of claim 39, wherein the second network node is configurable as a master node or a network node, the master node controlling bandwidth of the local network for all sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) on the local network, the network node controlling bandwidth of the local network for sources (Aharoni, Col. 10 lines 21-47, video and audio source, Col. 3 lines 29-47, transporting) connected to the network node but not other sources. (Aharoni, Col. 5 lines 43-47, raw video source)

For claim 161, Aharoni teaches, the method of claim 78, further comprising:

allocating predetermined bandwidth of the local network to a data stream received via a connection of the multiple connections having capacity above a predetermined threshold; (Aharoni, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

and allocating bandwidth remaining after allocating the predetermined bandwidth to one or more data streams received via connections of the multiple connections of the multiple connections having capacity not above the predetermined threshold. (Aharoni, Col. 3 lines 46-60, rate control unit, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

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For claim 162, Aharoni teaches, the method of claim 114, wherein the second network node is configurable as a master node or a network node, the master node controlling bandwidth of the local network for all sources on the local network, the network node controlling bandwidth of the local network for sources connected to the network node but not other sources. (Aharoni, Col. 14 line 63 to Col. 15 line 7, maximum bandwidth not reached)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 153-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni in view of ExtLan. Extending the power line LAN up to the neighborhood transformer (referred to as ExtLan).

For claim 153, Aharoni fails to clearly disclose, the system of claim 1 wherein the network is a power line network.

ExtLan teaches, the system of claim 1 wherein the network is a power line network. (ExtLan, QOS in power lines, page 68)

Aharoni and ExtLan are both in the field of network communication

Aharoni and ExtLan are compatible since ExtLan is directed to communication transmission medium and Aharoni works with any communication type network (Aharoni, Col. 6 lines 34-45)

It would obvious to one of ordinary skill in the art at of the invention to combine Aharoni with ExtLan because ExtLan provides the added improvement of allowing users to share printers and internet connection from different rooms in the same house. (ExtLan, introduction, page 64)

Claims 154 and 155 are rejected for similar reason to that of claim 153.

For claim 156, Aharoni-ExtLan teaches, the system of claim 153, wherein one of the network conditions used by the second bandwidth adjustment module in changing the compression parameters comprises noise on the network from one or more devices connected to the power line network. (ExtLan, QOS in power lines, page 68)

It would obvious to one of ordinary skill in the art at of the invention to combine Aharoni with ExtLan because ExtLan provides the added improvement of allowing users to share printers and internet connection from different rooms in the same house. (ExtLan, introduction, page 64)

Claims 157 and 158 are rejected for similar reason to that of claim 156.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Notice of references cited (if appropriate).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-3906. Also any interview requests should be faxed directly to the examiner at (571)-273-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145